

Village Safe Water Trip Report
Alaska Department of Environmental Conservation
Division of Water - Facility Construction & Operation
555 Cordova Street; Anchorage, AK 99501
(907) 269-7929 ph; (907) 269-7509 fax

DATE: June 10-11, 2009

REPORTER: Matt Walker 

LOCATION: Platinum, AK

PROJECT NO: 06EE17 / 71138

PURPOSE: Project Kick-off Meeting, Preliminary Site Investigation

CONTACTS: Lou Adams – Platinum Traditional Village Administrator
Mark Moyle - Citizen

ACCOMPANIED BY: Bob Gilfilian, MWH
David Prusak, MWH
John Pepe, EDC
David Maser, Alaska Land

Travel Information: Yute Air
(907) 543-3003

Weather: Sunny, Mid 50's, June 10
Overcast and Windy, Low 40's, June 11

ACCOMPLISHMENTS (FINDINGS):

Departed Anchorage at 7:00 AM on Alaska Airlines to Bethel and arrived in Platinum at 11:00 AM on a private charter (Yute Air).

We were met at the airport by Mark Moyle, who MWH was renting vehicles from (one truck @ \$100/day, one ATV @ \$50/day) who then drove us to the honey bucket home owned by Albert Kilbuck that was being rented to MWH for this trip at \$80/person.

We met Lou Adams, the Platinum Village Tribal Administrator, to go over preparations for the meeting scheduled at 3pm. I also took the opportunity to look at the building for the washeteria. It is currently located directly next to the City Office building and is not hooked up to electricity, water, or septic. A more detailed evaluation was conducted the next morning.

We took a quick tour of the temporary septage site. MWH plans to investigate using this site as the permanent permitted septage disposal site. Their first glance feeling is that it will work well, and that would fit well with the desires of the City.

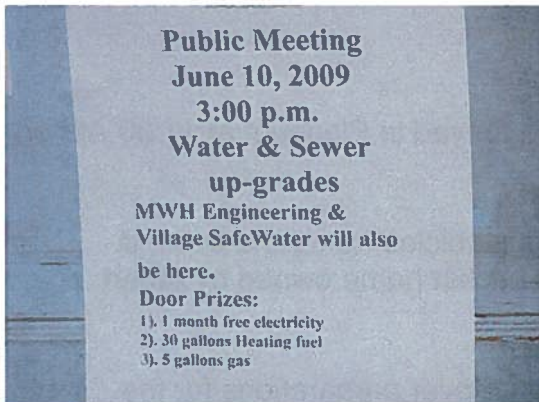


Lou Adams and Bob Gilfillian at Septage Site



Current and Proposed water source / well

The meeting was held at the City office at 3pm. Lou thought the turn-out was excellent, largely due to the door prizes (gas and heating oil from the City, gift cards and coffee from MWH, vegetables from David Manzer of Alaska Land Status). Minutes of the meeting are enclosed with this trip report. MWH asked for my comments on the meeting and thus all my notes are included in these minutes. These minutes are an excellent summary of the meeting from my perspective.



The group split up for the remainder of the trip. John Pepe of EDC walked the town looking at the exterior electrical infrastructure at homes as well as touring the generator facility. At first glance he believes the electrical capacity of the generators is too small currently, and would be vastly undersized for any expansion to the water system (heat trace loads, treatment loads). He discussed this issue with Mark Moyle, who has extensive local knowledge and a good technical foundation as a former mine engineer in the area. This local knowledge of the current generator capacity of the city should help EDC determine the needs of the community.

David Manzer attempted to speak to as many residents as possible to get an understanding of land status issues and priorities. Several of these issues actually involve Mark Moyle and so David spent a good amount of time with him on this trip to come to grips with these issues.

I assisted Bob Gilfillian and David Prusak of MWH with some preliminary surveying measurements and other site investigations. This included determining offsets from septic systems to wells, homes, and water bodies. We also looked at Mark Moyle's septic tank in the Platinum Commercial building to try and determine where his drain field is. That is important because the City has said they will not hook him up to water until he can verify he does not drain wastewater into the Smalls River. We then

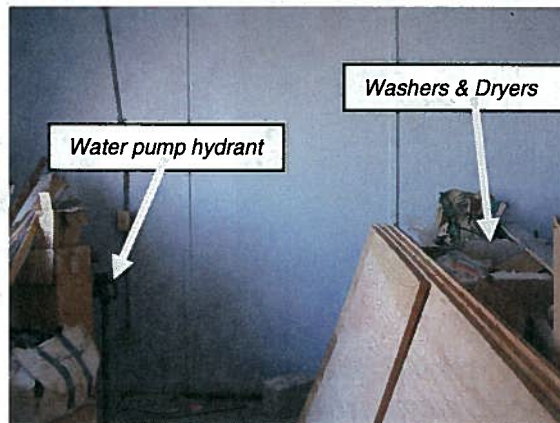
looked at the schools failing septic system and a leak in the water service.

On June 10th, David Manzer continued investigating land status issues with residents. John Pepe performed as many in-house surveys as possible looking at the ability to support heat trace on services. David Prusak spent the morning with Lou Adams to identify which homes would receive services and also to review the Validation Memo of the Feasibility Study.

Bob Gilfilian and I took time to take measurements and make observations on the washeteria building. It appears this building was not placed with any thoughts of usage in the short term. Its orientation and proximity to the City office building create access problems. There are no stairs or locks on the doors. The building is not hooked up to electric, water or septic. There is a pump hydrant coming through an uninsulated hole in the floor. There is a septic line behind the building; however another home nearby has tied into this septic system (likely without authorization from the city) with an above grade arctic pipe. The septic system has failed as there is surface wastewater next to the washeteria and the cleanout overflows. The inside of the building is not configured for the amenities desired by the City, namely bathrooms and showers. One of the two rooms had a fuel oil leak when the Toyo heater that was in the building was removed. Some sections of the floor and walls had been replaced because of the leak, but the odor of fuel oil was pervasive and did not allow for a few minutes in the building at one time. There are two washers and two dryers, all with coin slots, being stored in the building. A discussion with Lou Adams revealed that the community does not even want the building at that location. I seriously question the suitability of the building for the task of a washeteria. The idea was floated by MWH of perhaps combining a water treatment plant building with a washeteria to perhaps locate the washeteria in a more ideal location and share O&M costs between the two functions.



Fuel Oil Leak Area



Water and Washers



A few activities were performed to wrap up the trip. These include inspecting some honey bucket sites, looking in the school for pressure tanks (could not be found), looking at the current (and non-functioning) pumper truck, and visiting the fish processing facility and Knik Construction docking facilities.



Pumper Truck / Tank



Honey Bucket Site

We left Platinum at about 5:00 PM going to Bethel on the Yute Air charter, and then took an Alaska Airlines flight to Anchorage, arriving at 10:00 PM.

A complete photo log from this trip can be seen on the VSW network:
G:\Water\FACILITIES\Photo\Photo_Volume _1\VSW 2009\Platinum\June 10-11, 2009

ENCLOSURES: MWH Trip Report, MWH Minutes from Kick-Off Meeting

cc: Reading file, VSW Anchorage

DISTRIBUTION LIST:

Operations Assistance: e-mail
Kerry Lindley – Juneau

Platinum Trip Report
June 10-11, 2009
Page 5 of 5

Kent Knapp – Anchorage

Village Safe Water: e-mail

Bill Griffith

Greg Magee

Doug Poage

Debra Addie

John Johnson



TRADITIONAL VILLAGE OF PLATINUM WATER AND SEWER PROJECT



Kick Off Meeting

June 10, 2009

3:00 P.M.

The meeting was held at the Platinum City Offices and was attended by 19 adults and 1 child from the community, including Tribal Administrator, Lou Adams.

INTRODUCTION

- Matt Walker, VSW Project Engineer, introduced himself to the community.
- MWH Design Team – David Prusak, MWH Project Manager, introduced team members Bob Gilfilian of MWH, David Manzer of Alaska Land Status, and John Pepe of EDC, and the roles each will have in the project.

PROJECT INTRODUCTION

- David reviewed the Scope of Work for the project, with major items of validating the 2003 Feasibility Study, provide site investigation, develop a Conceptual Design, hold a Conceptual Design Workshop in Platinum, and finalize the findings with a CDRM, which will include water treatment options, extensions of water services, extension of the water distribution system, sewerage options, septage disposal, permit identification, land status issues, and historic and archeological issues. The schedule currently anticipates completion of this contract by September 2009.
- This contract does not include any solid waste or landfill issues.

2003 STUDY VALIDATION MEMO

- Highlights changes since 2003 in the Memo, including: new treatment rules, economic investment in the community with the new fish plant and employment opportunities, the school reopening, population increases over the past two years, improved climate data, and VSW funding becoming available.

CONFIRMATION OF 2003 GOALS

- Water System
 - Extend the below grade water distribution system to unserved buildings.
 - Construct a new community water treatment facility to comply with the Alaska Department of Environmental Conservation (ADEC) regulations.
 - Move the septic leech field to meet the ADEC separation requirements to protect the community water source.

- Sewer System
 - Construct individual or shared septic systems for unserved buildings.
 - Close uncontrolled honey bucket disposal areas.
 - Construct an ADEC-approved facility for septage disposal.
- Community Concerns Raised
 - Watering points are broken. Can they be repaired soon?

POPULATION

- Current levels have increased
- Seasonal changes – summer vs. winter increase in the area.
- Future growth is likely due to employment opportunities.
- Housing can be a limitation to population growth.
- This is key in designing an appropriate sized system and recommending the best treatment type system.

WATER TREATMENT

- Bob lead this discussion. The community confirmed they very much like the taste of the Platinum water. There are several ways to mitigate concerns for chlorine, which were addressed.
- Groundwater and saltwater impacts were discussed and will be looked at during the site investigation phase.
- Needs for testing water will occur to develop treatment option.
- Bob highlighted three priorities when deciding what treatment methods would be selected: simplicity, energy costs, and maintenance.
- A question was received about a concern that gravel deposits are in the pipe. This will be reviewed as part of the design process.

SEPTIC

- Tank drain fields were discussed. Platinum has good experience with maintaining septic tanks. Challenges of shared systems were briefly discussed. These systems, when maintained, can provide good treatment and be a low cost alternative.
- The septage disposal site was discussed and the current site is operated well. This area will be looked at closely for the permitted site.
- Community comments provided included that some septic systems may be improperly installed or improperly located. Response was that the design team would be looking at all septic systems and drain fields to identify issues, and land status will also identify issues with locations of systems.

- A question was raised about if someone will be responsible for septic maintenance and if there would be a new pumper truck. Response was that the system has historically been maintained rather well and will need to continue regular and proper maintenance. New pumping equipment will need to be evaluated from a funding and budgetary perspective and will also depend on the real need of the community.

EROSION ISSUES

- Smalls River has shown some erosion along a bank near the wells, although currently it does not appear to threaten the well. The treatment plant location will need to take this into consideration. The community shared their observation of tidal surges inland.
- Limits of historic tide influence (high tide limits) were identified by the community on the maps.
- Coastal erosion is also occurring; it appears to be getting closer to the east-west runway.

ELECTRICAL RELIABILITY

- John discussed his findings at the generator. There is very little capacity available from this generator. It was replaced this winter and downsized. With the new demands of a treatment plant and the heat trace for water and sewer services, it is unlikely that the generator will be able to handle these increased demands.
- House surveys will be conducted to look at electrical conditions to take into account the heat trace requirements.
- Impact by airport improvements and power needs were raised, that has a backup generator.

LAND STATUS

- David Manzer led this discussion and how important property issues need to be identified early. He will be doing research on land status and requested community assistance in identifying areas of concern.
- Septic tanks will be of high concern as they should be within an individual property and not encroach on land that would not belong to them.
- Maps were left on the walls in the City office to allow community members to identify any issues they see over the next few weeks.
- Audience questions included getting the water line extended to the northern portions of the project site, as there are some land status issues.
- Question as to when water will be extended in north Platinum. This will be influenced by many factors, including: site investigation results, land status issues, and funding.

WHAT TO EXPECT

- This week, home and house surveys (land status, electrical, and plumbing issues). Lou will be coming with along during the visits.

- July site investigation is now scheduled for June 22 through 26. This will allow for lab tests to be completed and incorporated into a Draft Conceptual Design and presented at the Conceptual Design Workshop. There may be some impacts to the community, especially during the well testing, during the site investigation.
- Conceptual Design Workshop was tentatively set for July 17, but will be modified to suit the community for greater involvement. The Conceptual Design will be finalized about a month after the Workshop.
- No new historic and archaeological issues have yet been identified. Community assistance was requested to bring anything to our attention if they are aware of any new items being raised.

MWH TRIP REPORT

DATE: June 10-11, 2009

REPORTER: David Prusak, P.E.
Bob Gilfilian, P.E.

LOCATION: Platinum

MWH PROJECT NO: 1006802.010103
VSW Project No: 09-VSW-PTU-007-00

PURPOSE: Travel to Platinum for Water and Sewer Project Kick-off Meeting

ACCOMPANIED BY: Matt Walker (VSW Engineer)
David Manzer (Alaska Land Status)
John Pepe, P.E. (EDC)

CONTACTS: Ms. Lou Adams (Traditional Administrator)
Mr. Henry Williams (Traditional President)
Mr. Gilbert Kilbuck (Mayor and electrical generator operator)
Steve (LKSD Custodian)
Numerous city residents

MAJOR ACCOMPLISHMENTS:

- Conducted Kick-off Meeting for the water and sewer project (meeting minutes under separate cover).
- Began on-site land status investigation with community interviews and learned of various court actions on disputed properties.
- Reviewed electrical demands of community and airport expansion.
- Toured electrical generator and interviewed operator.
- Reviewed electrical distribution and service connections in 90% of buildings.
- Toured pump house and wells, performed a brief drawdown test.
- Inspected some existing septic systems and improperly connected septic service to drain field for the washeteria.
- Toured washeteria. Learned of fuel-contaminated floor, site location challenges, and electrical demand that will occur when equipment is connected will overload existing electrical system. Assisted VSW in measuring the building.
- Investigated school and teacher housing, found a single pressure tank and booster pump within teacher housing. Measured distance from septic tank to high water mark.
- Investigated the exteriors of several houses for possible utility connections.
- Investigated Omni Corporation housing, including large rental building, the associated septic tank, and interior discharge line.
- Toured unpermitted dump site.
- Toured temporary septage disposal site.
- Documented some of the uncontrolled honey bucket disposal areas.

- Visited new CVRF fish processing facility.
- Met with Superintendant Glenn Stout of B.C. Contracting (airport expansion contractor). Discussed availability of backhoe for site instigation work and other equipment rental.
- Confirmed with Lou Adams which buildings are to receive utility services, along with which buildings are considered seasonal and unheated or buildings in serious disrepair.
- Received comments from Lou Adams on the Validation Memo for revision.
- Mad housing arrangements for site investigation work scheduled for June 22 through 26.

DISCUSSION

Wednesday June 10

Met team members at Anchorage Airport, traveled to Bethel on Alaska Airlines Flight 41 at 7:00 AM, connected with a charter flight on Yute Air and arrived in Platinum at approximately 10:30 AM.

We were met by Mr. Mark Moyle from whom Ms. Lou Adams arranged the renting of a vehicle and four wheeler (truck rental – \$100/day, four wheeler rental – \$50/day). He drove us to a honey bucket home owned by Albert Kilbuck, from whom we have rented the house for this trip (\$80/person).

Lou Adams joined us to discuss preparation for the kick off meeting.

Lou Adams took us on a tour of the unpermitted dump site and discussed the actions of CVRF related to trying to relocate and construct a new landfill. It is this facility the Platinum Traditional Village would then operate. Currently the City of Platinum charges customers for the dump site use.

We then drove up to the temporary septage disposal site next to the metal disposal area. We found this to be in very good condition, good soils for this type of use, and though it is approximately three miles out of town (a long distance to haul), contamination would not be a concern, the elevation of the disposal site makes environmental issues such as floods, odor, and contamination towards the public less of a threat.

Meeting was held at the City Offices. Announcements for the meeting had been distributed through the community. Team members reviewed the agenda for the meeting and prepared for their roles in the presentation. After a brief walk through parts of the community we set up for the meeting, set up wall maps, and prepared a sign in sheet. Project Kick-off Meeting began at 3:00 PM and was completed by 5:00 PM. Meeting minutes were kept and provided under a separate cover.

Began investigations on legal and land status, primarily focused on water rights issues surrounding Omni Well #1, 2003 Feasibility Study document not too revealing on issue and have discussions with Mark Moyle on the topic (his home is on the property nearest this location).

Mr. Moyle indicated he plans to relocate his home as it resides on property he does not own and is involved in a different court action. It is the drain field serving this house that is within 149.5'

from City Well No. 2, which violates ADEC separation requirements for a septic system to a public drinking water source. He indicated he intends to move the house near his property in north Platinum near his building where he rents our rooms (N 20).

Mr. Moyle explained his desire to connect to the water system with his building on the north end (N 20), as he now hauls water to a large tank to supply this building and rental units. He has an existing septic system serving this building, with a large interior tank, and exits to a drain field under a road, but he has been able to prove exactly where it runs. He invited us to look at the system, which we did. The building was from the 1940s, the septic tank was in the basement, was 4 feet high by 4 feet in diameter, and made of steel (believed to be original). The discharge pipe was 4 inches in diameter and ran 45 feet inside the building, running to the east, and exits the building at a depth measured at approximately 4 feet. During this time we learned of other court actions occurring in north Platinum on land disputes.

Mr. Moyle got the keys to the school and we toured it, looking at the septic tank, which visually appears alright; however, there are some problems that appear to be associated with the drain field, causing it to be pumped once a week when school is in session. We were not able to locate the two pressure tanks in the school documented in the 2003 FS and we were unable to access the teacher house. We observed a leak on the water service line coming into the school near the southwest corner near the exterior water shutoff valve leaking at an estimated 1 gallon per minute.

During this time, John Pepe toured the generator building, interviewed the operator of this facility, and met with the contractor for the airport improvements.

Thursday Jun 11

David Manzer worked on several land status issues with documents he carried as he and John Pepe prepared to do home and house surveys. David interviewed home owners while John Pepe looked at electrical services and the ability to allow for heat trace for service lines. Lou Adams accompanied them to assist and provide introductions and interpretations.

Matt and Bob took several measurements of the washeteria and discussed with Lou the challenges of the site. John Pepe looked at the electrical loads needed for the equipment there and concluded that there is not enough capacity from the existing generator to support this building. They also looked at a newer home on Lot 8B (Mary Johnson) that is connected to the septic tank and drain field for the Washeteria. This line has a history of backing up and may have some problems with the service line, as well as being connected to a system that is not on lot 8B.

Reviewed community map with Lou to confirm with her which homes were to receive service lines and which were not to receive them. She reconfirmed with Bavilla's Trading Post that they do not want a service to the store. She also indicated that she does want all existing watering points removed and a single source provided at the new water plant. She indicated that near this point would be a better location for the washeteria to be relocated (near the Platinum Traditional Village Office).

Toured the school again after getting the keys from the custodian and asking where the pressure tanks were. Found only one tank in the teacher house, which had a booster pump on it, and the pressure gauge that read 50 psi. Found the distance from the high water mark to the septic tank to be at 100 feet.

Visited and photographed several uncontrolled honey bucket disposal sites – two on the north end and one on the south end of town.

Mark Moyle said the population in the summer exceeds 100 people. It was unclear where they all stayed.

Looked at all home exteriors that are planned for connections and those not heated year-round, including the church.

Rode out to the CVRF fish processing facility and looked at dock, tried to find the manager there but was unsuccessful. Looked at Knik Construction docking facilities for gravel shipping.

Reviewed pump house. Platinum was having trouble with cycling of the pumps believed to be associated with the tanks having too much pressure, they lowered the pressure and this appeared to solve the problem. Performed a brief draw down test on the well. It dropped from a static depth of 8 feet to a level of 11 feet below the top of the casing.

Measured the distance from the Moyle drain field at this time. The septic tank is also currently broke and is leaking to the surface at this location (S 21).

Reviewed entire Validation Memo with Lou to get her comments for this document. She requested these modifications to be made and the memo reissued.

Meet with Glenn Stout of B.C. Contracting to discuss equipment rental during the next visit. He gave us his E-mail address and will confirm the rates with us. He will also provide us a cost to rent a pick up and the costs of providing meals to the team.

Discussed with Mark Moyle the possibility to sharing the cost of a backhoe for the site investigation work, which would come from the Platinum mine. He needs to rent it to repair the broken septic tank on his property (S 21).

Paid fees for housing and vehicle rentals. We left Platinum on the Yute Air charter at 4:50 PM, connected to Alaska Airlines Flight 46 in Bethel, arriving back in Anchorage at 10:00 PM.

CONCLUSIONS

1. Community likes the quality of the water from the well, it appears and tastes very good.
2. There are some serious land issues that are outstanding.
3. The water rights issue at Omni Well # 1 appears very complicated
4. Electrical generation is an area that will require very careful review due to the limitations that exist today.
5. The community is very interested in the success of this project.

COPIES

Matt Walker, VSW
Lou Adams, Platinum